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INTERNATIONAL BULLETIN
OF PLANT PROTECTION

1937 No. 6

DISCOVERIES AND CURRENT EVENTS *

Angola: Locust Movements (*Nomadacris septemfasciata* and *Locusta migratoria migratorioides*) †

During the month of January, 1937, several swarms were reported in different localities of the Luanda, Benguela, Huila and Bié provinces.

In the Cambambe district, Luanda province, 600 kgs. of adults and 50 kgs. of eggs were destroyed; 300 kgs. of insects were also destroyed in the circumscription of Luchazes Bié province.

Eritrea: Locusts §

During the month of March, 1937, no locusts were reported in the Colony.

Observations made along the coastal region to ascertain any eventual appearance of the desert locust (*Schistocerca gregaria*) gave negative results.

Greece: The Lima Bean Pod Borer, *Etiella zinckenella* ††

An examination has been made at the Benaki Phytopathological Institute of *Etiella zinckenella* Tr. (*Lep. Pyralidae*), the moths of which have made their appearance in mid-April of the current year.

This insect is harmful to peas, beans, dolichos and soya beans in the Larissa region.

According to information given by the District Agricultural Service, if a wet summer occurs, the damage is limited to late varieties; but, if, on the contrary, there is a dry summer, the harvest may be completely destroyed.

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from Mr. JORGE DE BARROS RODRIGUES QUEIROZ, 'Ingénieur agronome', Director of the Laboratory of Plant Pathology and Agricultural Entomology, Luanda, attached as Technical Adviser to the Locust Control Services, transmitted to the Institute by the Government General of the Colony.

§ Communication from Dr. ROLANDO GUIDOTTI, Chief of the Agricultural Bureau of Eritrea, Asmara, transmitted to the Institute by the Government of the Colony.

†† Communication from the official correspondent of the Institute, Professor Dr. C. A. ISAAKIDÈS, Director of the Benaki Phytopathological Institute, Kiphissia-Athens, Greece.

Madagascar: Phytopathological and Entomological Notes *

The following notes were drawn up in November, 1936.

COFFEE.

Black rot, *Corticium koleroga* (Cooke) von Höhnel. In May, 1936, on samples originating from the Manakara region (East Coast), *C. koleroga* was found for the first time in Madagascar.

Witches' broom. In the north-west of Mandritsara on *Coffea arabica* plants grown in extremely poor soil and badly attacked by *Hemileia vastatrix*, twigs with a very considerable number of buds interspersed with fruits in which some seeds often have an incomplete development, were observed. On this coffee species, anomalies of this kind occasionally reported, chiefly in Uganda, Tanganyika and in the Philippines, would appear to be very rare. It was not possible to ascertain the cause of same.

Fomes? On the east coast and chiefly in the neighbourhood of Manakara, a disease affecting the collar and main roots of the coffee plant is found. This disease is caused by a fungus with a septated mycelium of a yellow colour which destroys the bark and bast but leaves the wood. This parasite can attack healthy coffee plants and provoke a rapid dying off. The sterility of the mycelium renders the identification of this organism impossible, which possibly belongs to the *Fomes* genus.

There appears to be some connexion between the extent of the disease and the poverty of the soil in phosphoric acid.

CASSAVA.

Mosaic. During the rainy season 1935-1936, in many parts of the island (South, Lake Alaotra, environs of Anjiro), a considerable diffusion of mosaic and a concurrent pullulation of *Aleyrodidae*, taking no doubt the part of vectors, were observed. In some farms, symptoms of disease were noted in all plants of the variety known as Malagasy cassava. The Agricultural Stations are breeding and distributing the most resistant types of cassava, having at the same time the necessary qualities for industrial uses.

Fire. A disease which has been designated by us under the name of 'fire' and which appears to have been present in the country for some considerable time, has caused in some regions a heavy leaf fall in the young cassava plants. The disease commences with small angular spots, of a light chestnut colour on the upper surface of the leaf, and bluish on the under side. In transparence,

* Communication from the official correspondent of the Institute, Mr. G. BOURIQUET, Chief of the Phytopathological Laboratory and Chief in Charge of the Laboratory of Agricultural Entomology, Pasteur Institute, Tananarive, Madagascar.

they ressemble the ' taches d'huile ' characteristic of the downy mildew of the vine (*Plasmopara viticola*). On the surface, very minute drops of a light yellow colour soon make their appearance. Then the injury spreads and causes the drying up of a considerable part of the folioles which then appear to have been touched by a flame. This last stage is observed chiefly in the lower leaves which may cause a premature leaf fall.

SUGAR CANE.

On maize an Aphis has been found which has been identified as *Aphis maidis* Fitch (= *A. adusta* Zeh.), vector of the sugar cane mosaic.

RICE.

The Chrysomelid *Trichispa sericea* Guer., long known in the country and called by the natives under the name of Haom-bary, swarms at the end of the dry season. It can cause considerable damage to transplanted rice when the rains are delayed and necessitate replanting in large areas of the rice-fields.

In October-November 1935 and during the same period in the following year, new experiments were undertaken for the purpose of determining methods for the control of this parasite. From observations made in the neighbourhood of Tananarive, it appears that at the end of the dry cold season, the first serious infestation occurs in the nurseries when the rice has not yet been transplanted and it is very important to free the young rice plants of this parasite before transplanting. When it is a question of controlling adults living on the surface of the leaves, a paraffin and soap emulsion may be used (water 100 litres, soap 2 ½ kg., paraffin 5 litres) or commercial preparations with a pyrethrum basis. In order to reach the larvae and nymphs protected from the insecticide by the leaf epidermis and which are not affected by submersion in water, the tips of the leaves where the insects are most numerous can be destroyed, either when the plant is growing in the nursery, or when lifted and put into bundles. But this process has the disadvantage of shortening the plants, thus rendering handling difficult, therefore, it is preferable to soak the rice bundles up to the level of the binding in boiling water for 15-30 seconds. This treatment does not have any harmful effect on the plant. If, in spite of this treatment, a considerable number of the insects appear on the transplanted rice, in order to prevent their spread, submersion of the rice fields for 48 hours is recommended, when the arrangement of the fields and the quantity of water at disposal permit. If this is not possible, 8 to 10 litres of gas oil to the hectare can be poured over the areas where the insects are most numerous. When this liquid has spread over the area, the plants are beaten with bamboo sticks 2 or 3 times at intervals of 15 minutes. By this means, in many experiments, a considerable proportion of insects were destroyed.

On some *Trichispa*, an organism (probably a mite) of a coral red colour was found, which appears to live on the beetle. As far as is known, this organism has not yet been reported. Some specimens have been forwarded to the Imperial Institute of Entomology, London, for identification.

Italian Somaliland: Locusts *

During the month of March, 1937, no locusts were reported in the Colony.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

French West Africa (Ivory Coast). — By Decree No. 51 S. E. of the Governor-General of French West Africa, dated 9 January, 1937, the Decree No. 3481 of Lieutenant-Governor of Ivory Coast, dated 17 November, 1936, rendering compulsory the declaration of the ' rosette ' disease [virus disease] of the groundnut is approved. (*Journal officiel de l'Afrique occidentale française*, Gorée, 23 janvier 1937, 33e année, nº 1704, p. 133).

French West Africa (French Guinea). — By Decree No. 28 A. G. of 7 January, 1937, the reward paid for the capture of rats at Conakry is increased to 0.25 fr. per animal, from 1 January, 1937. (*Journal officiel de la Guinée française*, Conakry, 15 janvier 1937, 27e année, nº 867, p. 32).

Germany. — By Decree of 5 February, 1937, the Decree of 27 March, 1935 [see this *Bulletin*, 1935, No. 6, p. 132], relating to the application of the Law on hunting of 3 July, 1934, has been modified.

The dispositions in force up-to-date conceded to the proprietors of enclosed lands, on special permission given by the competent authorities, the right to destroy rabbits causing damage to their crops. This concession has now also been extended to blackbirds. However, it is still forbidden to use fire arms for the destruction of these enemies unless special permission has been granted.

As a general rule, it is prohibited to spread poison bait outside houses and well-fenced-in areas. However, it is permitted in the control of mice, musk-rats, hamsters, and rats to use poisoned grains, preparations with a phosphorous basis, zinc phosphide and squill. Cartridges liberating a poison gas and carbon sulphide may also be employed. Preparations made with a thallium basis can only be adopted in exceptional cases and by special authorization of the competent authorities. All the poisons must be distributed in such a way as to prevent their access to animals other than those in question.

With regard to the destruction of crows and magpies by means of poison preparations, only poisoned eggs are to be utilized. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. März 1937, Bd. IX, Nr. 2, S. 22-25).

*** By Ordinance of 10 February, 1937, completing the Decree of 5 February, 1937, summarized above, regulations have been established to which eggs, rendered poisonous and intended for the control of crows and magpies, must conform.

* Communication from Dr. Ferrante Paveri Fontana, Chief of the Agricultural Bureau of Italian Somaliland, Mogadiscio, transmitted to the Institute by the Government of the Colony.

The eggs, natural or artificial, must have a minimum weight of 55 g. The openings through which the eggs will have been filled must be hermetically sealed.

The shell must be white and bear the word ' Giftei ' (poisoned egg) in clear, easily legible characters.

The toxic mixture which must fill at least three quarters of the egg, leaving, however, a small space free, must contain a quantity of phosphorus between 1 ½ % and 3 % of the weight of the egg. (*Ibid.*, S. 25).

*** By Ordinance of the Agriculture Corporation, dated 20 February, 1937 the general provisions of 12 March, 1936 [see this *Bulletin*, 1936, No. 7, p. 146] regulating seed certification have been completed by dispositions regarding the application of the rules established. (*Ibid.*, S. 25).

*** By Circular of 24 February, 1937, relating to grape-vines to be grafted, a list is given of the varieties which during the year 1937 and on authorization by the competent authorities, can be employed for this purpose.

The list gives two groups of varieties. The first group can be admitted in all wine-growing districts, while the second is excluded from the districts where the so-called ' kurzrüsslige ' phylloxera is known to exist. (*Ibid.*, 1. April 1937, Nr. 3, S. 69-70).

*** By Ministerial Disposition of 9 March, 1937, based on the Decrees of 28 March, 1929 and 30 September, 1932 for the purpose of preventing the introduction of the carnation leaf roller [*Tortrix pronubana*] [see this *Bulletin*, 1929, No. 6, p. 83; 1932, No. 12, p. 205; 1937, No. 1, p. 4], the importation of carnations (cut flowers) is authorized up to 30 April, 1937. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin, Anfang April 1937, 17. Jahrg., Nr. 4, S. 36).

Germany (**Anhalt**). — By Police Ordinance, dated 30 January, 1937, measures relating to the control of the beet leaf bug [*Piesma quadrata*] have been approved. The dispositions correspond to those sanctioned by the Decree of 21 December, 1936 [see this *Bulletin*, 1937, No. 3, p. 54] in Saxony. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. März 1937, Bd. IX, Nr. 2, S. 26).

*** By a second Ordinance of the same date relating to the control of the beet leaf bug in the regions under observation, it is decided that in order to prevent the diffusion of the existing centres of infestation, beet, spinach and white beet fields seriously infested with this pest, must, on notification by a competent official, be re-ploughed. (*Ibid.*).

Germany (**Bavaria**). — By Police Ordinance of 10 March, 1937, relative to hop downy mildew (*Pseudoperonospora humuli*) it is prescribed to lift up and bind the shoots of hop plants at at least 4 m. above the level of the ground, as soon as their height permits.

Hop crops must be treated with Bordeaux mixture or any other preparation recommended by the Plant Protection Service. The treatment must be repeated at least three times each year, and at least once during the flowering period.

Crops which have not received the above-indicated treatments during the period decided by the local police authorities, will be destroyed by request of these latter.

The police authorities can also cause the necessary operations to be executed at the expense of those who have delayed treatment. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. April 1937, Bd. IX, Nr. 3, S. 70-71).

Germany (Saxony). — By Decree of 23 February, 1937, official permits are to be issued to persons employed in the control of plant diseases and pests in horticultural establishments. Only those persons in possession of this permit are authorized to excercise this calling. Their work will be controlled by competent authorities. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. März 1937, Bd. IX, Nr. 2, S. 28-29).

England and Wales. — With the object of preventing the introduction, through the medium of imported plants, of the Chrysanthemum Midge (*Diarthronomyia hypogaea*, F. Löw), the Importation of Plants (Amendment) Order of 1937, dated 10 March, 1937, prohibits, as from 12 April, 1937, the landing in England or Wales from any country other than Scotland, Northern Ireland, the Irish Free State, the Isle of Man, or the Channel Islands of any living Chrysanthemum plant and parts thereof (except seeds) for planting, except under licence. The Order also prescribes that the health certificates required under the Importation of Plants Order of 1933 [see this *Bulletin*, 1933, No. 11, pp. 250-251] to accompany imported plants must include a statement that the consignment does not contain any Chrysanthemum plant. (*Statutory Rules and Orders*, 1937, No. 197, (D. I. P. 597), London, 1937, 2 pp.).

*** With the object of preventing the introduction of the cherry fruit fly [*Rhagoletis cerasi*], the Importation of Raw Cherries Order of 1937 prescribes that during the 1937 season cherries grown in Spain will be admitted without restriction until 18 May, after which date the importation of Spanish cherries is prohibited. Cherries grown in France will be admitted until 27 May if accompanied by a certificate of origin; after that date the importation of French cherries is prohibited, with the exception of district around Honfleur; details of this district are given in the Order. Cherries grown in Italy will be admitted until 12 June if accompanied by a certificate of origin; after that date only those certified to have been grown within the region of Emilia or the Province of Verona will be allowed to enter; after 23 June the importation of all Italian cherries is prohibited. Cherries grown in Germany will be admitted until 26 June if accompanied by a certificate of origin; after that date no German cherries will be admitted except those certified not to have been grown south of latitude 53° N. or in East Prussia. Cherries grown in Hungary will be admitted until 17 June if accompanied by a certificate of origin; after that

date, the importation of Hungarian cherries is prohibited. Certificates of origin must accompany cherries grown in any other European country which are imported after 18 May. (*The Gardeners' Chronicle*, London, April 24, 1937, Third Series, Vol. CI, No. 2626, pp. 263-264).

Argentine Republic. — By Decree No. 99.682 of 13 February, 1937, from 1 April, 1937, the transport of plants in general to the following zones is prohibited:—

The provinces of La Rioja, Catamarca, and Buenos Aires, South of the Ciudad of Bahía Blanca and the Territories of Río Negro, Neuquén, and Chubut, unless accompanied by a sanitary certificate issued by a technical officer authorized by the Ministry of Agriculture, following an inspection of the plants at the place of origin.

The transport of trees and ornamental plants, accompanied by a health certificate for free transit, and despatched by authorized nurseries to the above-mentioned zones is permitted if the plants originate in those officially recognized establishments existing in the same zones.

The transport of fruit trees, including grape vines and olive trees, at any period whatsoever to the provinces of Mendoza, San Juan, and Córdoba, is prohibited, unless accompanied by a sanitary certificate for the transit, delivered by a technical officer authorized by the Ministry of Agriculture.

The exemptions accorded by Article 4 of Decree No. 76.891 of 18 February, 1936 [see this *Bulletin*, 1936, No. 6, p. 126], for the transit of plants in general and fruit trees destined to the above-mentioned zones, are revoked.

The Decree No. 45.741 of 21 July, 1934 [see this *Bulletin*, 1934, No. 12, p. 276] is also revoked. (*Boletín Oficial de la República Argentina*. Buenos Aires, 4 de marzo de 1937, año XLV, núm. 12.797, pág. 2465).

*** By Decree No. 99.906 of 17 February, 1937, the port of Alvear, Province of Corrientes, is authorized up to 30 June, 1937 to receive oranges originating in Itaquí, Brazil, in transit to the Federal Capital where they will be inspected. (*Ibid.*, págs. 2465 y 2466).

*** By Decree No. 100.594 of 20 February, 1937, the import and export of leaf and cut tobacco can only be effected through the ports of Buenos Aires, Rosario, Santa Fé, and Bahía Blanca.

The customs authorities shall not permit the importation nor the embarkment for export of any consignment of tobacco unless a certificate of inspection granted by the ' División de la Producción Tabacalera ' of the Department of Agriculture is presented, and in which it is stated, *inter alia*, that the product is in good health condition. (*Ibid.*, pág. 2466).

Australia (Queensland). — A Proclamation of 18 March, 1937, prohibits the removal of sugar-cane plants in the parish of Sophia, Mulgrave District, on account of gumming disease [*Bacterium vasculorum*]. (*Queensland Government Gazette*, Brisbane, 20 March, 1937, Vol. CXLVIII, No. 59, pp. 1051-1052).

Colombia. — By Decree No. 2850 of 17 November, 1936, as a measure of phytosanitary protection, the introduction of used packing sacks into the country is absolutely prohibited. (*Diario Oficial*, Bogotá, 22 de diciembre de 1936, año LXXII, núm. 23365, pág. 768).

*** The President of the Republic approved on 2 March, 1937, an agreement drawn up between the Minister of Agriculture and Commerce and Mr. Efraím Henrique Isaacs Molano, by which the latter will make in Germany specialized studies in tobacco pathology. (*Ibid.*, 17 de marzo de 1937, año LXXIII, núm. 23435, pág. 566).

*** By Resolution No. 95 of 4 March, 1937 permission is no longer accorded for the introduction of those plants remaining in the custom-houses of the Republic which were not accompanied by a certificate of health from the country of origin, or those which in the opinion of the Agricultural Inspector of Plant Protection constitute a danger in the propagation of diseases in the interior of the country. (*Ibid.*, 12 de marzo de 1937, núm. 23431, pág. 533).

Scotland. — The Sale of Diseased Plants (Scotland) (Amendment) Order of 1937, dated 16 February, 1937 substitutes in Article 1 of the Sale of Diseased Plants (Scotland) Order of 1936 [see this *Bulletin*, 1936, No. 7, p. 156] for the words 'Inspector of the Department of Agriculture for Scotland' the words 'Inspector of the Department of Agriculture for Scotland or of the Local Authority'. (*Statutory Rules and Orders, 1937. No.* $\frac{110}{S.\ 3}$. *Destructive Insect and Pest, Scotland. The Sale of Diseased* (*Scotland*) (*Amendment*) *Order of 1937. Dated February 16, 1937*, London, 1937, 1 p.).

*** The Importation of Plants (Scotland) (Amendment) Order of 1937, dated 25 March, 1937, prohibiting as from 12 April, 1937 the importation of Chrysanthemum plants, contains provisions analogous to those adopted against the Chrysanthemum Midge (*Diarthronomyia hypogaea*) for England and Wales [see this *Bulletin*, 1937, No. 6, p. 122]. (*Destructive Insect and Pest, Scotland. The Importation of Plants* (*Scotland*) (*Amendement*) *Order of 1937, Dated March 25, 1937*, 2 pp. [Mimeographed]).

France. — In the programme, approved on 6 February, 1937 by the Minister of Agriculture, of research work and studies which shall be undertaken in 1937 by the Stations and Laboratories dependent on the 'Direction' of Agriculture, also figure numerous questions relative to Plant Pathology, Agricultural Zoology and Phytopharmacy. (Ministère de l'Agriculture. Direction de l'Agriculture. *Bulletin de l'Office de Renseignements agricoles*, Paris, 15 février 1937, année 1937, nº 4, p. 84-85).

*** A Decree of 15 March, 1937 promulgates the International Convention for Plant Protection, signed at Rome on 16 April, 1929 [see this *Bulletin*, 1929, No. 4, pp. 50-55]. (*Ibid.*, 15 avril 1937, nº 8, p. 146-148).

*** A notification of the Ministry of Agriculture indicates to producers and exporters of cherries in Great Britain the regulations which must be complied with, in conformity with the Importation of Raw Cherries Order of 1937 [see this *Bulletin*, 1937, No. 6, pp. 122-123]. Copies of the certificates (attestation of origin and phytopathological certificate) are appended to this notification. (*Journal officiel de la République française*, Paris, 12 mai 1937, LXIX^e année, n° 109, p. 5189).

India. — The Notification No. F. 116-34-A., dated 11 November, 1936, informs that the Chief Agricultural Officer in Sind is empowered to inspect and grant certificates in respect of plants intended for export to the United Kingdom and to other countries the Governments of which require a certificate of freedom from disease to accompany consignments of plants. Arrangements have been made at the Fruit Farm, Mirpurkhas, Sind, for inspection and certification, but 10 days notice in advance has to be given by the consignors in each case. (*Agriculture and Live-stock in India*, Delhi, March, 1937, Vol. VII, Pt. II, p. 241).

Italy. — According to Article 5 of the commercial and shipping treaty between the Kingdom of Italy and the Turkish Republic, signed at Rome, 29 December, 1936 and put into force by the Royal Decree-Law No. 287 of 14 January, 1937, each of the contracting parties reserves the right to ban or restrict the import, export and transit of goods coming within the transactions between the two countries, *inter alia* for reasons of sanitary and veterinary policy and with a view to protect animals and plants against diseases, pests and parasites of every kind, provided that these prohibitions or restrictions be applied at the same time to all other countries finding themselves in the same conditions. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 24 marzo 1937, anno 78°, n. 69, pp. 1110-1112).

*** By Law No. 428 of 18 January, 1937, has been changed to Law the Royal Decree-Law No. 1530 of 11 June, 1936 [see this *Bulletin*, 1936, No. 9, p. 202] modifying the Law No. 987 of 18 June, 1931 [see this *Bulletin*, 1931, No. 9, p. 166] containing measures for the protection of cultivated plants and agricultural products against noxious agents, also measures for the organization of Services relative thereto. (*Ibid.*, 15 aprile 1937, n. 88, pp. 1428-1429).

*** By Ministerial Decree of 22 March, 1937, a competition based on examinations and qualifications is opened for the obtention of ten bursaries of finishing courses in plant pathology and economic entomology at the Royal Research and Experiment Institutes for Phytopathology and also the Royal Observatories for Plant Diseases. (*Ibid.*, 20 aprile 1937, n. 92, p. 1492).

*** By Decree of the Minister of Finance, dated 26 March, 1937, the application of the exchange duty at the reduced rate of 0.50 lire per cent. is extended from 1 April, 1937 to the parasiticide 'Saponafis'. (*Ibid.*, 4 maggio 1937, n. 103, p. 1642).

*** By Decree of the Minister of Finance, dated 30 March, 1937, the application of the trade duty at the reduced rate of 0.50 lire per cent., is extended to the parasiticides 'Neodendrin' and 'Miscodrin'. (*Ibid.*, 29 aprile 1937, n. 99, p. 1593).

Morocco (French Zone). — A Decree of the Director of Waters and Forests, dated 11 February, 1937, authorizes the destruction of boars causing serious damage to crops in certain zones in the circumscription of civil control of Zaër. (Empire chérifien. Protectorat de la République française au Maroc. *Bulletin officiel*, Rabat, 5 mars 1937, XXVI[e] année, n° 1271, p. 329).

*** By Decree of the Director of Economic Affairs, dated 25 February, 1937, a syndical Association has been established for the control of plant parasites, which is called 'The Syndical Association for the control of the red scale at Foucauld'.

The Association is administrated according to the prescriptions of the Dahir of 17 December, 1935 [see this *Bulletin*, 1936, No. 5, pp. 107-108] and the Decrees taken relating to the application of this text [see this *Bulletin*, 1936, No. 5, p. 108, and No. 8, pp. 179-180], its purpose being for the control of the red scale [*Chrysomphalus dictyospermi*].

The offices of this Association are established at Foucauld, Maison du colon. (*Ibid.*, p. 328-329).

Mauritius (Colony of). — By Proclamation No. 10 of 29 February, 1936, the importation of the following articles into Mauritius from any country or place whatever, including the Dependencies of Mauritius, is absolutely prohibited:—

(*a*) Grape-vine plants imported from countries where phylloxera [*Phylloxera vastatrix*] exist, except when such plants are accompanied by a certificate signed by the Director of Agriculture, or other competent official authority of the country of origin, to the effect that the vines have not been exposed to the infection of phylloxera for the six weeks prior to the date of shipment;

(*b*) earth and leaf and garden mould;

(*c*) live plants of all sorts, including roots, tubers, cuttings and grafts in any description of earth or soil;

(*d*) dung or animal droppings (except guano, and dung or animal droppings from Rodriguez);

(*e*) forage;

(*f*) timber with the bark on.

The importation into Mauritius, from Réunion, of seeds of plants for use as green dressings is absolutely prohibited.

The importation of sand and ballast shall only be permitted under a permit previously obtained from the Director of Agriculture, and subject to such conditions as he may prescribe for the unloading, packing, removal and for the treatment of such sand and ballast before any use is made thereof.

The importation into Mauritius of tobacco seeds from any country or place whatever, including the Dependencies of Mauritius, shall be permitted only if

such seeds are either accompanied by a certificate signed by the Director of Agriculture or other competent official authority in the country of origin to the effect that the seeds have been properly disinfected before shipment, or, failing the production of such certificate, after disinfection in the Colony by the Department of Agriculture before delivery.

The importation into Mauritius of potatoes from any country or place whatever shall as from the 1st of July, 1936, be permitted only if each consignment is covered by a certificate signed by a competent official in the country or place of origin that the potatoes originated from a district free from potato wart (*Synchytrium endobioticum*) and Colorado beetle (*Leptinotarsa decemlineata*).

The following articles may be imported under a permit previously obtained from the Director of Agriculture:—

(*a*) sugar canes or cuttings or any other part thereof and the living vegetable parts (e. g. leaves, stems or roots) of any other member of the family of Gramineae;

(*b*) living plants or bulbils of *Agave* or *Fourcroea*;

(*c*) tea plants;

(*d*) dung or animal droppings from Rodriguez;

(*e*) live plants of all sorts, and any parts thereof, and all seeds and fresh fruits when imported by air transport.

The following articles when imported under a permit from the Director of Agriculture, or where the importation thereof is not prohibited, shall before delivery at the port of entry be inspected by an officer deputed for the purpose by the Director of Agriculture on the application of the importer:—

(*a*) sugar canes or cuttings thereof;

(*b*) live plants of all sorts, including roots, tubers, cuttings, grafts, buds and all parts, or sections of any sort, of live plants;

(*c*) all seeds and fresh fruits whatever;

(*d*) dung or animal droppings from Rodriguez.

The consignee or his agent shall, upon request, open the coverings and afford the inspecting officer every facility for conducting the examination.

If, on such inspection, the articles are found to be not free from pests or diseases they may be ordered to be destroyed by the consignee or his agent under the supervision of the inspecting officer, or to be subjected to such process of disinfection or treatment as the inspecting officer may prescribe, and the consignee or his agent shall pay in respect of such treatment such fees and charges as are prescribed.

Wrappings, cases, packages, or other coverings which contain or have contained any of the articles above mentioned may also be ordered to be destroyed by the consignee or his agent under the supervision of the inspecting officer.

If removal is authorized, all sugar canes or cuttings thereof, and at the discretion of the Director of Agriculture, any other live plants including roots, tubers, cuttings, grafts and buds and all parts and sections of any sort of such live plants, shall be planted in nursery apart from growing plants of the same kind and shall be subject to inspection by the Department of Agriculture from time to time during at least twelve months from the date of importation.

If, on such inspection, the articles are found to be not free from pests or diseases not known to occur in the Colony they shall be rooted out and destroyed by the owner under the immediate supervision of the inspecting officer, and if found to be not free from pests or diseases known to occur, they shall be so treated by the owner as may be directed by the Director of Agriculture.

Nothing herein contained shall prohibit or prevent the Government from making such importations of articles as it may require for scientific investigations. (*Legal Supplement to the Official Gazette of the Mauritius Government*, No. 24 of February 29th, 1936, pp. 15-18).

*** By General Notice No. 502 the collection and transport of adult beetles of *Phytalus smithi* Arrow is strictly prohibited in certain areas of Moka and Flacq districts. (*The Government Gazette of the Colony of Mauritius*, Port Louis, September 5, 1936, No. 57, p. 412).

New Zealand. — By Special Order made by the Martinborough Council on 8 February, 1937, and published by the Minister of Agriculture on 17 February 1937, broom [*Cytisus scoparius*], gorse [*Ulex europaeus*], hemlock [*Conium maculatum*], and milk-thistle [*Silybum*] are declared noxions weeds within the Borough of Martinborough. (*The New Zealand Gazette*, Wellington, February 25, 1937, Numb. 12, p. 478).

Western Samoa. — A Proclamation of 1 March, 1937 prohibits the exportation to the Union (Tokelau) Islands of:—

(i) Any copra sacks or other sacks shipped from or through American Samoa or Western Samoa;

(ii) Passengers' baggage or any personal effects;

(iii) Trees, shrubs, plants, vegetables, fruits, etc.;

(iv) Native mats or matting, or other articles or things fabricated within the islands of Polynesia from plants or plant matter;

(v) Soil or humus, whether packed separately or with or adhering to any other articles or things;

unless they shall have been fumigated at a fumigating station immediately previously to export. (*The Western Samoa Gazette*, Apia, March 17, 1937, No. 100, p. 571).

Tunis. — The Decree of 5 January, 1937 (22 chaoual 1355) regulating the import of vegetables into Tunis, disposes that Article 4 of the Decree of 29 January, 1892, modified by the Decrees of 5 July, 1924 and 23 September, 1932, is again modified as follows:—

'The vegetables listed in Article 3, paragraph 1, which must be accompanied by a certificate of origin, may be imported into Tunis by sea or land.

By sea, they may only be introduced through the ports of Bizerte, Tunis, Sousse, Sfax and Gabes.

By land, the import of these vegetables is authorized through the customs houses of Ghardimaou and Rhilane, but in these two cases, verification is made

at Tunis and transit per Ghardimaou or Rhilane is effected as for international transit. The importation of these vegetables is also authorized through the Tunisian customs at Babough, under the conditions established by Decree of the Director of Economic Affairs.

These vegetables may only introduced during the period from 15 October to 15 May, with the exception of flowerbulbs, the import of which is authorized from 1 August, after sanitary inspection by one of the agents specially nominated for this purpose by the Director of Economic Affairs'. (*Journal officiel tunisien*, Tunis, 2 février 1937, 56e année, nº 10, p. 133).

*** By Decree of 21 January, 1937 (9 doul kaada 1355) and by derogation of Decree of 3 May, 1933, the replanting is authorized, as a special instance and only for the 1936-1937 season, on equal areas, of vines, which were uprooted during the year 1936 in accordance with the Decrees of 24 January, 1892 and 5 July, 1924, relating to the protection of vineyards against grape phylloxera [*Phylloxera vastatrix*].

This replanting of vines may only be effected after an individual enquiry by the Technical Services of the Direction of Economic Affairs and on areas situated outside infested zones and protection zones.

In the case where replanted vines might be later infected with grape phylloxera, the persons or companies who were authorized to effect the said replanting shall not benefit by the indemnities provided for by Article 23 of the Decree of 5 July, 1924. (*Ibid.*, 22 janvier 1937, nº 7, p. 86).

*** By Decree of 28 January, 1937 (16 doul kaada 1355) and by derogation to the dispositions of Article 1 of the Decree of 29 January, 1892, modified by the Decree of 24 December, 1903, the Director of Economic Affairs is authorized to import into Tunis, during the period from 25 January, 1937 to 15 March, 1937, cuttings of American vines, rooted cuttings and grafted rooted cuttings, with a view to the production of stock plants destined for the reconstruction of Tunisian vineyards.

Paragraph 5 of Article 17 of the Decree of 29 January, 1892, modified by the Decree of 5 July, 1924, is also modified as follows:—

'The multiplication of the American vine by seeds, cuttings, slips, graftings, etc., is authorized under special conditions established by Decree of the Director of Economic Affairs'. The remainder of the paragraph is unaltered.

The cuttings must be accompanied by a certificate of health and origin, stating that they have been inspected and are free from all plant and animal parasites.

The importation shall only take place through the port of Tunis or Ghardimaou under the following conditions:—

(1) All cuttings must be enclosed in boxes;

(2) Customs inspection of the cuttings cannot be carried out except in the presence of both the phylloxera delegate and a phylloxera expert;

(3) On arrival, the cuttings shall be disinfected at the expense of the State, under the control of the above-mentioned phylloxera officials;

(4) The packing material, which must not comprise any debris of the vine plant or any plant material still fresh, shall be burnt after opening. (*Ibid.*, 2 février 1937, nº 10, p. 134).

*** A Decree of the Director of Economic Affairs, dated 15 February, 1937, regulates the importation, though the customs houses of Babouch, of vegetables proceeding from Algeria. (*Ibid.*, 16 mars 1937, nº 22, p. 330).

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I. Die Verhütung des Auftretens von Pflanzenkrankheiten und-schädlingen (Hygiene) von H. Braun (S. 26-31).
A. Kulturmassnahmen von H. Braun (S. 31-130).
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b) Saat-und Pflanzgutentseuchung von E. Riehm (S. 210-243)
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NOTES

Official Correspondents. — Dr. SÁNDOR ANTALFY, Ministerial Councillor, Chief of the Phytopathological Section, Ministry of Agriculture, Budapest, has been nominated official correspondent of the International Institute of Agriculture for questions relating to plant protection in Hungary.

Seventh International Entomological Congress. — This Congress will be held at Berlin in August, 1938 instead of October, 1937 as previously announced by the press.

Prof. ALESSANDRO BRIZI, *Segretario generale dell'Istituto, Direttore responsabile.*

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